



## Ship Design

In the top photo is the U.S. Navy's USS *Ticonderoga*, the first of the new CG-47 Class of guided missile cruisers equipped with the advanced Aegis fleet defense system, which automatically tracks hundreds of attacking aircraft or missiles, then fires and guides the ship's own weapons in response. The *Ticonderoga* is being built by Ingalls Shipbuilding Division of Litton Industries, Pascagoula, Mississippi. Ingalls, a leading designer and producer of Navy combat ships, oil drilling rigs, barges and other vessels for the offshore marine industry, has contracts for three additional CG-47 cruisers.

In constructing the ships, Ingalls used the NASA NASTRAN computer program, supplied to the company by NASA's Computer Software Management and Information Center (COSMIC). The NASTRAN program was also employed in another Navy/Ingalls project involving design and construction of four DDG-993 Kidd Class guided missile destroyers, one of which is shown above.